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Management Measures to Help Control Disease in Horses and Ponies

What measures can I take to help control disease?

Good management is the key to preventing or controlling the spread of disease. Good management practices aim to keep horses in good condition and in a healthy environment, in order to reduce the risk of introduction and spread of disease, to identify individuals especially at risk and to promote rapid recovery if disease does occur. Management considerations include stabling, feeding, grazing, fencing, vaccinations and worming. You should discuss all aspects with your veterinarian to develop a practical and economic management and preventive medicine program appropriate to your own circumstances.

Do horses require stabling?

Native horses and ponies have evolved to be best adapted to outdoor conditions but this is not necessarily true for many domesticated types and this life-style does not suit performance horse requirements. Those who live out at all times should be provided with shelter either in the form of a run-in shed or stable or some large trees with dense cover.

If your horse is stabled for some or much of the day, a very important feature is good ventilation. Allergic respiratory disease is a constant 'battle' for the stabled domesticated horse. The stable structure should be such that there is free flow of air from front to back or side to side. Alternately there should be adequate height to the ceiling to let stale air rise and then exit through vents preferably in a ridge at the highest point of the roof.

A good deep bed should be provided both for comfort and to help avoid injury and bedding should be clean and dust free to reduce the stimulation of respiratory allergy.

The doorway and ceiling should be high enough so the horse does not knock his head when entering or leaving or if he throws his head up. American style barns are now very popular for housing large numbers of horses. Their construction should allow for good ventilation as their main disadvantage is the rapid spread of disease from one horse to another, which is possible with this sort of housing, that is basically a single air space.

Solid, brick or block stabling is always preferable to wooden constructions as they can be more thoroughly and successfully steam cleaned and disinfected.

What should I feed my horse?

Feeding is a very complex issue. Every horse has basic requirements for water, energy, protein, minerals and vitamins. Water should be clean and freely available at all times. Automatic drinkers should be regularly cleaned and checked that they are functioning correctly. Energy is provided by most foodstuffs, although poor quality grass and hay may contain very low levels of energy, much of which is reasonably difficult to digest. Protein and energy requirements increase during growth (foals and yearlings), pregnancy, lactation and during strenuous exercise, so grazing may need to be supplemented either with good quality hay or concentrates for performance horses or pregnant mares whose diet consists largely of grass. Vitamin and mineral requirements for unstressed adult horses can often be met entirely by grazing good quality pasture. Young growing horses, pregnant mares and performance horses need supplementation. Many vitamin and mineral supplements are available commercially in the form of 'licks' that can be attached to a fence, wall or supplied in a bucket to be left standing in the paddock. Other supplements come in liquid or powder form to be added to concentrated feed. Do not be tempted to mix supplements unless you have been advised to do so by your veterinarian or a competent equine nutritionalist as it is possible to create imbalances.

What should I do to help look after my paddock?

Fencing should be safe and sturdy and must be regularly checked and maintained for potentially injurious damage. Barbed wire should never be used in horse or pony paddocks and paddocks should be free of all extraneous debris, implements and other items that may result in injury.

Droppings should ideally be regularly picked up from paddocks to reduce patchy grazing and also to reduce the risk of parasite infestation. If you have a large enterprise, there are now 'dropping picking machines', powered by small tractors, that will help to get the job done more effectively.

Never overstock your paddocks. Horses and ponies will fight and injure themselves if made to live in close proximity, grass will be ruined by overgrazing and 'poaching', horses will be continually re-infested with parasitic worms from each others' droppings and the stress of overcrowding will increase their susceptibility to infectious and contagious diseases. Overstocking is a sure sign of bad management.

Mechanical removal of horse droppings from paddock

Is it necessary to isolate any new horses coming into the stables?

Strict isolation for horse or pony enterprises is seldom possible to arrange. Nevertheless, for premises where there is a number of or a relatively high turnover of horses, a small isolation unit should be organized. This should be as far as possible away from the main stable block and paddock area and should consist of one or more stalls and a small paddock. Any new horse should be put into isolation for three weeks on arrival. During this time it should be monitored for signs of disease (e.g., raised temperature, depression, inappetance, weight loss, nasal discharge, diarrhea, skin disease). The use of this type of isolation facility helps to reduce the risk of infection, that may be introduced by new horses, who may be incubating disease or may be symptomless 'carriers'. Likewise if a problem occurs the affected horse(s) can be isolated from the rest until a diagnosis is made and recovery complete.

What about vaccinations?

The availability of safe and efficacious vaccines for some equine infectious diseases is one of the success stories of modern veterinary medicine. Speak to your veterinarian to discuss and formulate the best policy for your own needs. The most commonly used vaccines available are:

Tetanus – there is no excuse for any horse or pony not to be fully vaccinated against this invariably fatal disease, the cause of which, Clostridium tetani, is a bacterium that is widespread in the environment and commonly contaminates wounds. Vaccination ensures freedom from worry every time your horse has an injury. Tetanus vaccine is initially administered on two occasions a month apart and can be first administered from 3 months of age. A third vaccine is given at 12 months and booster vaccinations are given every 12months. In most cases this vaccination regime can be combined with that for influenza (see our handout on Tetanus for more details).

Equine Influenza – this is an unpleasant disease that can cause epidemics of raised temperature, depression, nasal discharge and coughing in horses. It can be fatal in young foals and donkeys. More commonly it can disrupt horse training, racing and performance events and therefore certified vaccination against influenza is a condition of entry to Jockey Clubs, sales and many other equine premises. Equine Influenza vaccine is initially administered on two occasions a month apart and can be first administered from 3 months of age. A third vaccine is given 6 months later and booster vaccinations should be given every 6 months thereafter. In most cases this vaccination regime can be combined with that for tetanus (see our handout on Influenza for more details).


Horse paddock being grazed by sheep

Equine Herpesviruses – these can cause a 'cold-like' respiratory disease that can be very disruptive in race or performance horses in training and can be fatal in young foals. The viruses can cause abortion in pregnant mares or neurological disease (in-coordination or paralysis) in all types of horses. Equine Herpesvirus 1 and 4 vaccine is initially administered on two occasions a month apart and can be first administered from 3 months of age. A third vaccine is given 6 months later and booster vaccinations should be given every 6 months thereafter (see our handout on Equine Herpesvirus infections for more details of these important diseases).

Other available vaccines are against rotavirus infections, that can cause epidemic and life-threatening diarrhea in foals, and Equine Viral Arteritis (EVA), that can cause a 'cold-like' respiratory disease, abortion in pregnant mares and a viral shedding 'carrier' status in stallions. All stud farms should consider immunizing their mares with rotavirus vaccine and their stallions and teasers with EVA vaccine. Discuss this with your veterinarian and see our handout on EVA.

A new vaccine against strangles (Streptococcus equi) is now available. While it does not prevent strangles infection it is said to reduce the severity of the disease (abscess formation) and the manufacturers recommend it for use in high risk situations.

What about worms?

Worm problems are discussed in more detail in another handout. It is important, however, to have in place a deworming program that involves:

- ideally rotational paddock management with periods of paddock rest
- regular removal of droppings

- routine and strategic administration of anthelmintic drugs (worming medication) and assessment of the worm control program with periodic dropping testing for worm eggs.

All three measures are important in the control of internal parasites and worm control will fail if one is unsatisfactory. New horses should be dewormed on arrival and ideally groups of horses that are turned out together should all be dewormed at the same time. See our separate client handout on deworming for more detailed advice on this very important subject.

How can I justify the expense of preventive medicine?

The question should really be how can I justify not budgeting for the expense of preventive medicine! There is never any question that prevention is better than cure and the costs of unsatisfactory management in relation to horse health and welfare can be very high. Apart from important welfare considerations, the costs of diagnosis, treatment, recuperation, time off and return to performance are much higher than satisfactory vaccination and worm control. Discuss this with your veterinarian who will help you formulate a cost-effective program tailored to the individual needs of you and your horses.

Where should I go for further advice?

There are numerous texts available that describe in detail the dimensions and recommended construction of stables and paddocks. Many horse magazines now carry excellent articles on management and your veterinarian will always be able to advise you when it comes to horse welfare, nutrition, deworming and disease control.

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